

WHAT IS CLAIMED IS:

1. A method for predicting usage of a collection of content portions comprising:  
entering a user information need, a requested user starting location and  
5 a requested number of iterations;  
determining the connection topology of the collection of content portions;  
for each connection determined, determining proximal information cue words associated with each connection, storing at least one of the proximal  
10 information cue words based on the connection;  
determining a predicted user presence in the collection of content portions by determining similarity between the stored proximal information cue words and the user information need;  
determining a user path from the requested user starting location to a  
15 final destination based on the user information need based on spreading activation using the predicted user presence in the collection of content portions and the requested starting location for the requested number of iterations.

2. The method of claim 1, wherein determining the proximal information cue words comprises determining information cue words forming the connection.

3. The method of claim 1, further comprising:  
If a connection is determined to be an image based connection,  
determining information cue words from the connected to content portion, the  
information cue words including at least one of title, words in the connected to  
content portion, and using the connected to content portion information cue words as  
25 proximal cue words for the image link.

4. The method of claim 1, wherein the connection topology information is stored in a matrix.

5. The method of claim 1, wherein the information about proximal information cue words is stored in a word/document matrix.

6. The method of claim 1, further comprising:  
determining a weighted term frequency for each word in the collection  
of content portions; and

wherein determining a predicted user presence in the collection of content portions comprises:

determining a similarity between the stored proximal information cue words, the weighted frequency for each word and the user information need.

7. A system for predicting usage of a collection of content portions comprising:

a controller;

a memory;

a topology determining circuit that determines the topology of a collection of content portions;

an input/output circuit for entering a user information need, user requested starting location in the collection of content portions and a requested number of iterations;

a connection determining circuit that identifies connections between content portions;

a proximal information cue word determining circuit that determines proximal cue words for each determined connection and stores at least one of the proximal information cue words based on the connection;

a user presence predicting circuit that determines a similarity between each stored proximal information cue word and the user information need to create an information scent array;

a spreading activation circuit that determines a user path based on the user requested starting location in the collection of content portions to a final destination in the collection of content portions based on spreading activation applied the requested number of iterations to the information scent array and the user requested starting location in the collection of content portions.

8. The system of claim 6, wherein the proximal information cue word determining circuit determines information cue words that form the connection.

9. The system of claim 6, further comprising:

a circuit that determines if a connection is an image based connection; and

a circuit that determines information cue words from the content portion connected to by the connection, the information cue words including at least one of title and words in the connected to content portion, and using the connected to content portion information cue words as proximal cue words for the image link.

5           10.     The system of claim 6, further comprising a topology information memory for storing the connection topology information in a matrix.

          11.     The system of claim 6, further comprising a proximal information cue word memory for storing information about proximal information cue words in a word/document matrix.

10           12.     The system of claim 6, further comprising:  
                   a weighted frequency determining circuit that determines a weighted frequency for each word in the collection of content portions; and  
                   wherein the user presence predicting circuit determines the similarity  
                   between each stored proximal cue word, each stored proximal cue word's respective  
 15           weighted term frequency and by the user information need.